Electronic TUBES

6AM4

TRIODE

FOR UHF MIXER AND AMPLIFIER APPLICATIONS

DESCRIPTION AND RATING

The 6AM4 is a miniature high-mu triode designed for use as a grounded-grid mixer or amplifier in television receivers that operate in the ultra-high-frequency region. Its sharp-cutoff and high transconductance, coupled with its excellent isolation between input and output, make the 6AM4 well suited for grounded-grid mixer or amplifier service over the entire range of VHF-UHF television frequencies.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential

Heater Voltage, AC or DC	6.3	Volts
Heater Current	0.225	Amperes

Direct Interelectrode Capacitances	With Shield*	Without Shield	
Plate to Cathode	0.16	0.16	μμf
Cathode to Grid and Heater	4.6	4.4	μμf
Plate to Grid and Heater	2.8	2.4	μμf
Heater to Cathode	1.8	1.8	μμf

MECHANICAL

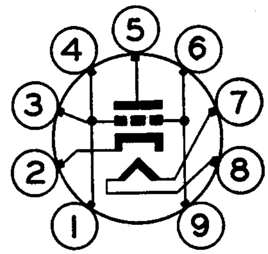
Mounting Position—Any
Envelope—T-6½, Glass
Base—E9-1, Small Button, 9-Pin

MAXIMUM RATINGS

DESIGN-CENTER VALUES

Plate Voltage	200	Volts
Positive DC Grid Voltage	0	Volts
Plate Dissipation	2.0	Watts
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	80	Volts
Heater Negative with Respect to Cathode†	80	Volts

BASING DIAGRAM

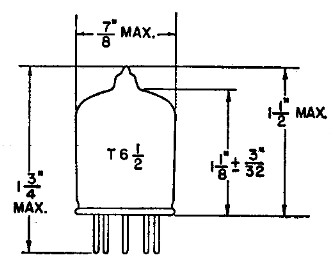


RETMA 9BX

TERMINAL CONNECTIONS

Pin 1—Grid
Pin 2—Cathode
Pin 3—Grid
Pin 4—Grid
Pin 5—Plate
Pin 6—Grid
Pin 7—Heater
Pin 8—Heater
Pin 9—Grid

PHYSICAL DIMENSIONS



RETMA 6-1

GENERAL ELECTRIC

Supersedes ET-T806, dated 5-52

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A_1 AMPLIFIER

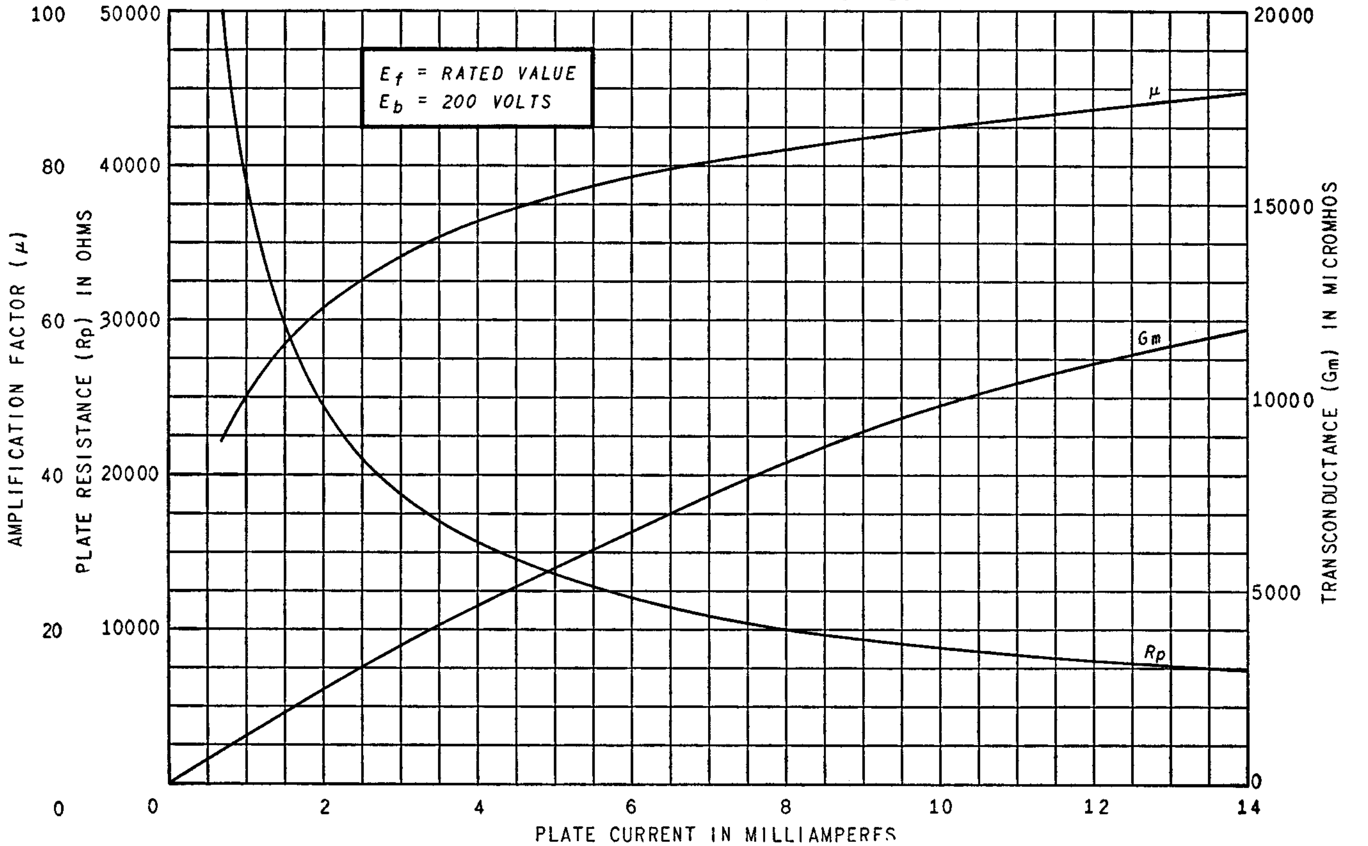
Plate Voltage	200	Volts
Cathode-Bias Resistor	100	Ohms
Amplification Factor	85	
Plate Resistance, approximate	8700	Ohms
Transconductance	9800	Micromhos
Plate Current	10	Milliamperes
Grid Voltage, approximate		
Ib = 10 Microamperes	−6.5	Volts

* With external shield (RETMA 315) connected to grid.

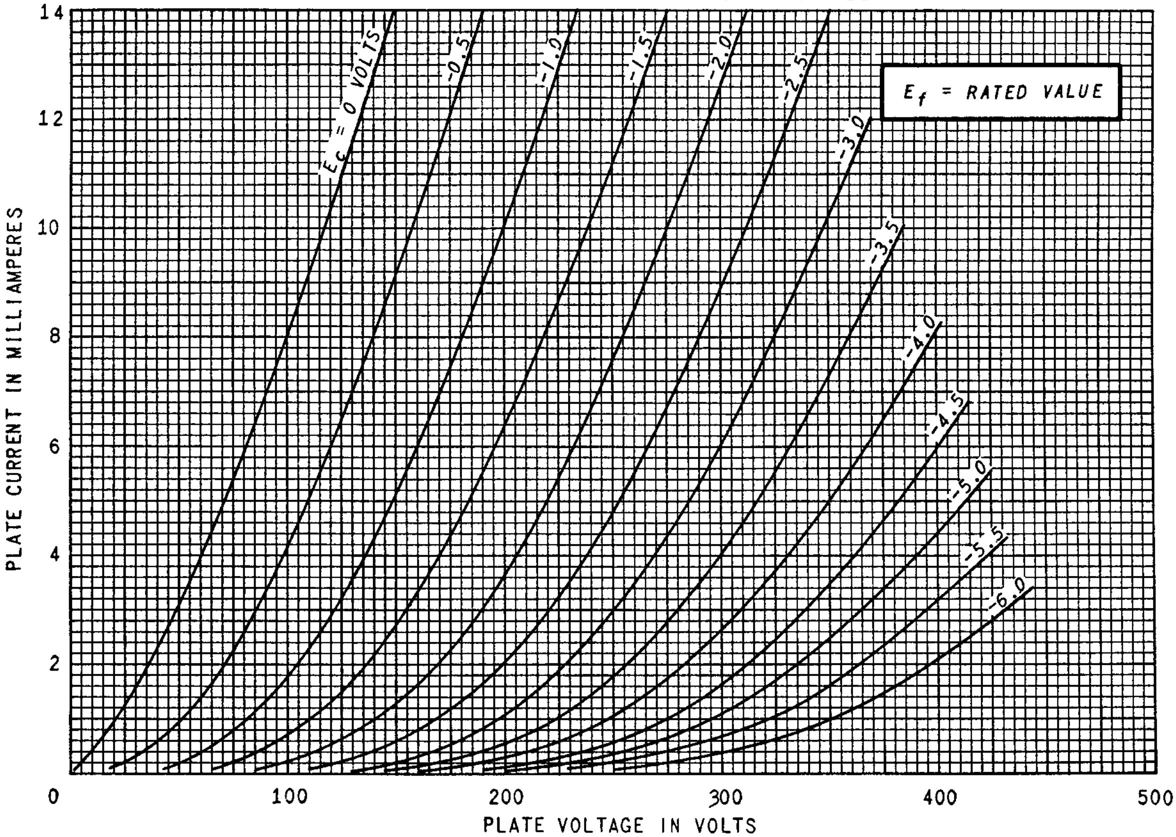
† When the tube is used in a cascode amplifier with a second tube and the two tubes are connected in series, this voltage may be as high as 250 volts maximum under cutoff conditions.

Note: When the 6AM4 is used in grounded-grid operation at high frequencies, all five grid terminals should be grounded to minimize the effects of grid-lead inductance.

AVERAGE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

